



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,241	01/14/2002	Matthias Bratz	42044 Cont.	1890
26474 7590 02/15/2007 NOVAK DRUCE DELUCA & QUIGG, LLP 1300 EYE STREET NW SUITE 1000 WEST TOWER WASHINGTON, DC 20005			EXAMINER QAZI, SABIHA NAIM	
			ART UNIT 1616	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/15/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/043,241

Applicant(s)

BRATZ ET AL.

Examiner

Sabiha Qazi

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-17 and 19-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-17 and 19-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Non-Final Office Action

Claims 10-17 and 19-23 are pending. No claim is allowed at this time.

Summary of this Office Action dated Friday, 02/09/07

1. Information Disclosure Statement
2. Copending Applications
3. Specification
4. 35 USC § 101 Rejection
5. 35 USC § 112 --- First Paragraph Written description Rejection
6. 35 USC § 112 --- First Paragraph Scope of Enablement Rejection
7. 35 USC § 112 --- Second Paragraph Rejection
8. 35 USC § 103(a) Rejection
9. Response to Remarks
10. Communication

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Copending Applications

Applicants must bring to the attention of the examiner, or other Office official involved with the examination of a particular application, information within their knowledge as to other copending United States applications, which are "material to patentability" of the application in question. MPEP 2001.06(b). See *Dayco Products Inc. v. Total Containment Inc.*, 66 USPQ2d 1801 (CA FC 2003).

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-17 and 19-21 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-9 of prior U.S. Patent No. 6,482,772. This is a double patenting rejection. Presently claimed invention is drawn to a solid mixture of sulfonylurea and an alkylpolyglycoside, their preparation and method of use for controlling undesirable plant growth, same invention is claimed in US '772. The claims are EXACTLY the same.

35 USC § 112 --- First Paragraph Written Description Rejection

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 1616

2. Claims 10-17 and 19-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Presently claimed invention is drawn to:

*A solid mixture comprising a) a sulfonylurea herbicide and
b) an alkylpolyglycoside (claim 10). The term "sulfonylurea" is very broad and contains hundreds of thousand of compounds.*

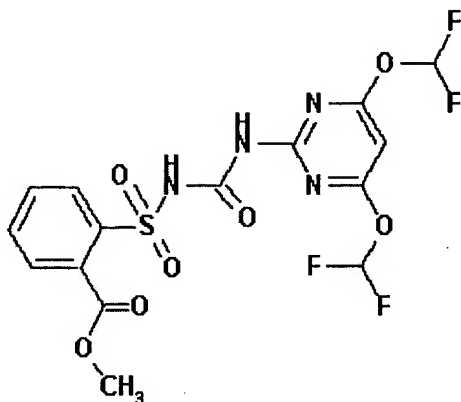
Applicant had no possession of the claimed subject matter at the time the application was filed. The specification discloses one sulfonylurea herbicide, which is metsulfuron methyl in Example 16 on page 32. Claimed subject matter is drawn to all sulfonylurea herbicides as in claims 10, 11 and 22.

Structure of the compound is drawn to show that how different are the structures (see more in scope of enablement rejection) and so would their properties.

The sulfonylurea herbicide (claim 10), encompasses thousands of compounds because it includes any sulfonyl urea. Further, for example, see the Formula in claim 11 where Z is nitrogen or carbon also includes thousands of compounds. Similarly see the Formula in claim 22, where J can be different heterocyclic and non-hetrocyclic groups.

Applicant at the time of filing the application had no possession of all the claimed subject matter.

Art Unit: 1616



The written description requirement prevents applications from using the amendment process to update the disclosure in their disclosures (claims or specification) during the pendency before the patent office. Otherwise applicants could add new matter to their disclosures and date them back to their original filing date, thus defeating an accurate accounting of the priority of the invention. See 35 USC 132. The function of description requirement is to ensure that the inventor had possession, as of filing date of the application relied on, the specific subject matter claimed by him.

See *Genetech*, 108 F 3d 1361, 1365 (Fed. Cir. at 1366, 78, 1999).

The test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to one skilled in the art that the inventor had the possession at the time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claimed language. See *In re Kaslow*, 707 F 2d 1366, 1375 (Fed. Cir. 1983).

Art Unit: 1616

In the present case Applicant has no possession of method of the subject matter at the time the application was filed. Applicant is kindly requested explain this issue.

See MPEP 2163.06, for Applicant convenience relevant part is cited below.

**GENERAL PRINCIPLES GOVERNING COMPLIANCE WITH THE
"WRITTEN DESCRIPTION" REQUIREMENT FOR APPLICATIONS**

The first paragraph of 35 U.S.C. 112 requires that the "specification shall contain a written description of the invention * * *." This requirement is separate and distinct from the enablement requirement. See, e.g., *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1560, 19 USPQ2d 1111, 1114 (Fed. Cir. 1991). >See also *Univ. of Rochester v. G.D. Searle & Co.*, 358 F.3d 916, 920-23, 69 USPQ2d 1886, 1890-93 (Fed. Cir. 2004) (discussing history and purpose of the written description requirement); *In re Curtis*, 354 F.3d 1347, 1357, 69 USPQ2d 1274, 1282 (Fed. Cir. 2004) ("conclusive evidence of a claim's enablement is not equally conclusive of that claim's satisfactory written description").< The written description requirement has several policy objectives. "[T]he 'essential goal' of the description of the invention requirement is to clearly convey the information that an applicant has invented the subject matter which is claimed." *In re Barker*, 559 F.2d 588, 592 n.4, 194 USPQ 470, 473 n.4 (CCPA 1977). Another objective is to put the public in possession of what the applicant claims as the invention. See *Regents of the University of California v. Eli Lilly*, 119 F.3d 1559, 1566, 43 USPQ2d 1398, 1404 (Fed. Cir. 1997), *cert. denied*, 523 U.S. 1089 (1998). The written description requirement of the Patent Act promotes the progress of the useful arts by ensuring that patentees adequately describe their inventions in their

Art Unit: 1616

patent specifications in exchange for the right to exclude others from practicing the invention for the duration of the patent's term.

To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. See, e.g., *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1319, 66 USPQ2d 1429, 1438 (Fed. Cir. 2003); *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d at 1563, 19 USPQ2d at 1116. However, a showing of possession alone does not cure the lack of a written description. *Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 323 F.3d 956, 969-70, 63 USPQ2d 1609, 1617 (Fed. Cir. 2002). Much of the written description case law addresses whether the specification as originally filed supports claims not originally in the application. The issue raised in the cases is most often phrased as whether the original application provides "adequate support" for the claims at issue or whether the material added to the specification incorporates "new matter" in violation of 35 U.S.C. 132. The "written description" question similarly arises in the interference context, where the issue is whether the specification of one party to the interference can support the newly added claims corresponding to the count at issue, i.e., whether that party can "make the claim" corresponding to the interference count. See, e.g., *Martin v. Mayer*, 823 F.2d 500, 503, 3 USPQ2d 1333, 1335 (Fed. Cir. 1987). In addition, early opinions suggest the Patent and Trademark Office was unwilling to find written descriptive support when the only description was found in the claims; however, this viewpoint was rejected. See *In re Koller*, 613 F.2d 819, 204 USPQ 702 (CCPA 1980) (original claims constitute their own description); accord *In re Gardner*, 475 F.2d 1389, 177 USPQ 396 (CCPA 1973); accord *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). It is now well accepted that a satisfactory description may be in the claims or any other portion of the originally filed specification. These early opinions did not address the

Art Unit: 1616

quality or specificity of particularity that was required in the description, i.e., how much description is enough.

An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997). Possession may be shown in a variety of ways including description of an actual reduction to practice, or by showing that the invention was "ready for patenting" such as by the disclosure of drawings or structural chemical formulas that show that the invention was complete, or by describing distinguishing identifying characteristics sufficient to show that the applicant was in possession of the claimed invention. See, e.g., *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 68, 119 S.Ct. 304, 312, 48 USPQ2d 1641, 1647 (1998); *Eli Lilly*, 119 F.3d at 1568, 43 USPQ2d at 1406; *Amgen, Inc. v. Chugai Pharmaceutical*, 927 F.2d 1200, 1206, 18 USPQ2d 1016, 1021 (Fed. Cir. 1991) (one must define a compound by "whatever characteristics sufficiently distinguish it"). "Compliance with the written description requirement is essentially a fact-based inquiry that will 'necessarily vary depending on the nature of the invention claimed.'" *Enzo Biochem*, **>323 F.3d at 963<, 63 USPQ2d at 1613. An application specification may show actual reduction to practice by describing testing of the claimed invention or, in the case of biological materials, by specifically describing a deposit made in accordance with 37 CFR 1.801 *et seq.* See *Enzo Biochem*, **>323 F.3d at 965<, 63 USPQ2d at 1614 ("reference in the specification to a deposit may also satisfy the written description requirement with respect to a claimed material"); see also Deposit of Biological Materials for Patent Purposes, Final Rule, 54 FR 34,864 (August 22, 1989) ("The requirement for a specific identification is consistent with the description requirement of the first paragraph of 35 U.S.C. 112, and to provide an antecedent basis for the biological material

which either has been or will be deposited before the patent is granted." Id. at 34,876. "The description must be sufficient to permit verification that the deposited biological material is in fact that disclosed. Once the patent issues, the description must be sufficient to aid in the resolution of questions of infringement." Id. at 34,880.). Such a deposit is not a substitute for a written description of the claimed invention. The written description of the deposited material needs to be as complete as possible because the examination for patentability proceeds solely on the basis of the written description. See, e.g., *In re Lundak*, 773 F.2d 1216, 227 USPQ 90 (Fed. Cir. 1985). See also 54 FR at 34,880 ("As a general rule, the more information that is provided about a particular deposited biological material, the better the examiner will be able to compare the identity and characteristics of the deposited biological material with the prior art.").

A question as to whether a specification provides an adequate written description may arise in the context of an original claim which is not described sufficiently (see, e.g., *Enzo Biochem*, **>323 F.3d at 968<, 63 USPQ2d at 1616 (Fed. Cir. 2002); *Eli Lilly*, 119 F.3d 1559, 43 USPQ2d 1398), a new or amended claim wherein a claim limitation has been added or removed, or a claim to entitlement of an earlier priority date or effective filing date under 35 U.S.C. 119, 120, or 365(c). Most typically, the issue will arise in the context of determining whether new or amended claims are supported by the description of the invention in the application as filed (see, e.g., *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989)), whether a claimed invention is entitled to the benefit of an earlier priority date or effective filing date under 35 U.S.C. 119, 120, or 365(c) (see, e.g., *New Railhead Mfg. L.L.C. v. Vermeer Mfg. Co.*, 298 F.3d 1290, 63 USPQ2d 1843 (Fed. Cir. 2002); *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 47 USPQ2d 1829 (Fed. Cir. 1998); *Fiers v. Revel*, 984 F.2d 1164, 25 USPQ2d 1601 (Fed. Cir. 1993); *In re Ziegler*, 992 F.2d 1197, 1200, 26 USPQ2d 1600, 1603 (Fed. Cir. 1993)), or whether a specification provides

Art Unit: 1616

support for a claim corresponding to a count in an interference (see, e.g., *Fields v. Conover*, 443 F.2d 1386, 170 USPQ 276 (CCPA 1971)). Compliance with the written description requirement is a question of fact which must be resolved on a case-by-case basis. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d at 1563, 19 USPQ2d at 1116 (Fed. Cir. 1991).

2163.06 Relationship of Written Description Requirement to New Matter

Lack of written description is an issue that generally arises with respect to the subject matter of a claim. If an applicant amends or attempts to amend the abstract, specification or drawings of an application, an issue of new matter will arise if the content of the amendment is not described in the application as filed. Stated another way, information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter. There are two statutory provisions that prohibit the introduction of new matter: **35 U.S.C. 132** - No amendment shall introduce new matter into the disclosure of the invention.

35 U.S.C. 112 Specification. - Patent Laws

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 1616

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

35 USC § 112 - First Paragraph Scope Enablement Rejection

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10-17 and 19-23 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a sulfonylurea herbicide which is metsulfuron methyl in Example 16 on page 32 of the Specification, does not reasonably provide enablement for *all* sulfonylurea herbicides as claimed in claim 10, 11 and 22. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

Factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have been described in In re Colianni, 195 USPQ 150, 153 (CCPA 1977), have been clarified by the Board of Patent Appeals and Interferences in Ex parte Forman, 230 USPQ 546 (BPAI 1986), and are summarized in In re Wands (858 F2d 731, 737, 8 USPQ2d 1400, 1404 (Fed Cir. 1988). Among these factors are: (1) the nature of the invention; (2) the state of the prior art; (3)

Art Unit: 1616

the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary.

When the above factors are weighed, it is the examiner's position that one skilled in the art could not practice the invention without undue experimentation.

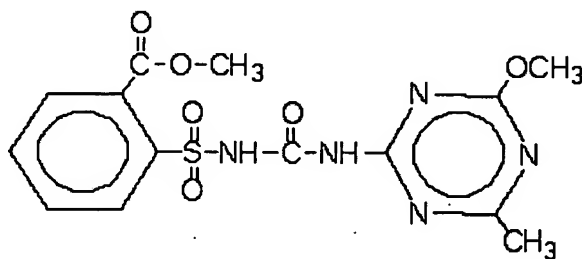
(1) The nature of the invention: The claims are drawn to a solid mixture comprising a sulfonylurea herbicide and an alkylpolyglycoside which includes all the known and unknown sulfonylurea herbicides.

(2) The predictability or unpredictability of the art: There is lack of predictability in the in the art. Claims are broad and are drawn to any sulfonylurea herbicide (claim 10), which encompasses thousands of compounds for example, see the Formula in claim 11 where Z is nitrogen or carbon. Similarly see the Formula in claim 22, where J can be different heterocyclic and non-hetrocyclic groups. All of these compounds encompass thousands and thousands of compounds. The specification does not have the support for such a wide variety of compositions and methods of the compounds. See KENJI HIRAI (Herbicide Classes in Development, mode of actions, targets, genetic engineering and chemistry, Springer, See the entire document especially Table 1 on page 181, Figs 1-6 on page 187-192). Structural modification of sulfonylureas with nitrogen-containing heterocycles such as pyrrole and pyrroazole rings

Art Unit: 1616

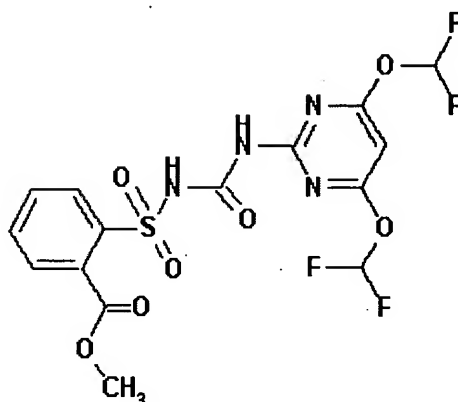
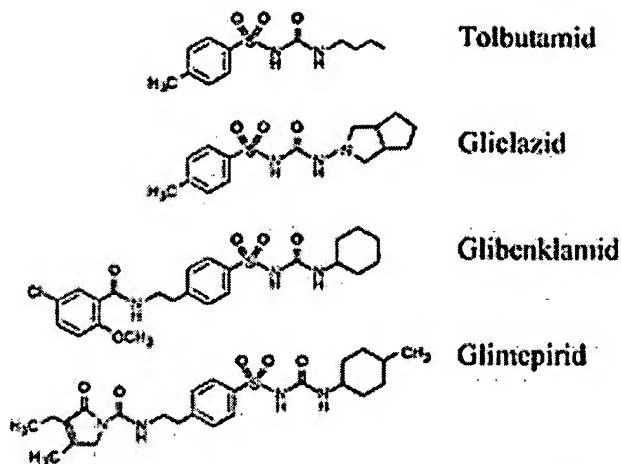
is shown chronologically in Figure 5, which includes pyrazosulfuron-ethyl and halosulfuron-methyl. Various type of sulfonylureas with five membered heterocycles are shown in Fig. 4, such as thifensulfuron. Other sulfonylureas possessing benzyl, sulfonamido, aniline and phenoxy groups are depicted in Fig. 6. Prediction to make any mixture or to predict any property for such a large number of compounds having different chemical structure and different properties is impossible as can be seen in the cited reference.

The following are some sulfonylureas. The compounds belong to different classes.



Metsulfuron methyl

Art Unit: 1616



Primisulfuron

(3) The amount of direction or guidance presented: There is no guidance in the disclosure on how to use the invention successfully with *all* sulfonylurea herbicides, just metsulfuron-methyl (example 16).

In re Dreshfield, 110 F.2d 235, 45 USPQ 36 (CCPA 1940), gives this general rule: "It is well settled that in cases involving chemicals and chemical compounds, which differ radically in their properties it must appear in an applicant's specification either by the enumeration of a sufficient number of the members of a group or by other

Art Unit: 1616

appropriate language, that the chemicals or chemical combinations included in the claims are capable of accomplishing the desired result."

The courts have further interpreted undue experimentation as requiring "ingenuity beyond that to be expected of one of ordinary skill in the art" (Fields v. Conover, 170 USPQ 276 (CCPA 1971)) or requiring an extended period of experimentation in the absence of sufficient direction or guidance (In re Colianni, 195 USPQ 150 (CCPA 1977)). Additionally, the courts have determined that "... where a statement is, on its face, contrary to generally accepted scientific principles", a rejection for failure to teach how to make and/or use is proper (In re Marzocchi, 169 USPQ 367 (CCPA 1971)).

(5) The presence or absence of working examples: There are no working examples and/or data to support the invention as presently claimed with *all* sulfonylureas; there is only one example to support metsulfuron. The disclosure does not contain working examples to support *all* sulfonylurea herbicides, only metsulfuron-methyl, as claimed.

A disclosure should contain representative examples, which provide reasonable assurance to one skilled in the art that the compounds fall within the scope of a claim will possess the alleged activity. See In re Riat et al. (CCPA 1964) 327 F.2d 685, 140 USPQ 471; In re Barr et al. (CCPA 1971) 444 F.2d 349, 151 USPQ 724.

It has been established by the Courts that a single species is seldom, if ever, sufficient to support a generic claim. In re Shokal, 242 F.2d 771, 113 U.S.P.Q. 283, 285 (C.C.P.A. 1957). See also, In re Grimme, 274 F.2d 949, 124 U.S.P.Q. 499, 501

Art Unit: 1616

(C.C.P.A. 1960) (the naming of a member of a genus or subgenus is not a proper basis for claiming the whole group).

Objective evidence of nonobviousness must be commensurate in scope with the scope of the claims. *In re Tiffin*, 171 USPQ 294. A showing limited to a single species can hardly be considered probative of the invention's nonobviousness in view of the breadth of the claims.

(6) The quantity of experimentation necessary: Since there is no guidance and/or direction provided by the Applicants in the disclosure to support for a solid mixture containing *all* sulfonylurea herbicides as claimed, one skilled in the art at the time of invention would have to go through undue experimentation to make and/or use the presently claimed invention.

The first paragraph of 35 USC 112 requires “...*such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains...*” The instant invention fails to meet this requirement, as it lacks such full, clear, and concise manner as to enable any person skilled in the art to which it pertains to make and/or use the invention.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1616

2. Claims 11-17 and 19-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Following reasons apply:

3. It is unclear what is the meaning of "alkylpolyglycoside" in claims? What is the meaning of degree of polymerization in claims 15 and 16 where the degree of polymerization can be 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 10-17 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over KOCUR et al¹ in view of over MALIK et al² and DUPONT³.

KOCUR et al teaches liquid herbicidal compositions comprising a compound of the Formula (I) and an alkyl polyglycoside and at least one surfactant. KOCUR et al teaches that the surfactants mentioned can be employed advantageously in combined formulations of I with other herbicidal active substances such as sulfonylureas like DPX-L-5300 (tribenuron), thiameturon-methyl, metsulfuron-methyl, or nicosulfuron (Ishihara), where they can enhance the action of I.⁴

tribenuron

STATUS: ISO 1750 (published)

¹ US Patent No. 5,258,358. Published November 2, 1993. See the entire document, especially Formula (I) in col. 1, lines 55-59 in col. 2, lines 29-35 in col. 3, Table 1 in col. 3 and 4, claims, and examples.

² US Statutory Invention Registration H224, published on March 3, 1987. See the entire document.

³ Dupont Escort®, Oust®, Telar® Product Information Bulletin, June 1996, 4 pages. See the entire document. Filed in Applicants' PTO-1449.

⁴ See lines 55-59 of col. 2,

Art Unit: 1616

IUPAC: 2-[4-methoxy-6-methyl-1,3,5-triazin-2-yl(methyl)carbamoysulfamoyl]benzoic acid

CAS: 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)methylamino]carbonyl]amino]sulfonyl]benzoic acid

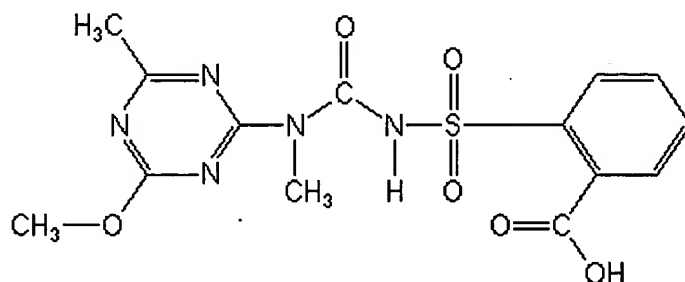
REG. NO.: 106040-48-6

FORMULA: C₁₄H₁₅N₅O₆S

ACTIVITY: herbicides (**triazinylsulfonyleurea herbicides**)

NOTES: When this substance is used as an ester or a salt, its identity should be stated, for example **tribenuron-methyl** [101200-48-0].

STRUCTURE:



INCHI: InChI=1/C14H15N5O6S/c1-8-15-12(17-13(16-8)25-3)19(2)14(22)18-26(23,24)10-7-5-4-6-9(10)11(20)21/h4-7H,1-3H3,(H,18,22)(H,20,21)/f/h18,20H

| [Home](#) | [Index of common names](#) | [Pesticide classification](#) | [Site Map](#) |
| [No frames](#) |

Instant claims differ from KOCUR et al in that KOCUR teaches the combination compound of Formula I **with** alkylpolyglycosides and sulfonyleureas in liquid form, whereas the instant claims are drawn to comprising a combination of alkylpolyglycosides and sulfonyleureas in solid form.

MALIK et al teaches that various materials such as insecticides, insect repellents, fungicides, bactericides, herbicides, and plant growth regulators may be formulated into various products for use on crops, for insect control, weed control and the like. Often, these products are applied as a dry powder or a granular material to the surface, which

Art Unit: 1616

is desired to be treated.⁵ MALIK et al teaches a specific dispersing aid is often employed when the product is to be applied in a powder or dry form and yet a second different dispersing aid is required when the product is to be applied as a semi-solid or liquid composition. It would be advantageous to prepare a product comprising the active ingredient and to utilize a single dispersing agent without regard to whether the final use application of the product is in a liquid or solid formulation. Moreover, the desirability of using a single ingredient as a dispersing agent reduces the possibility for error given the number of chemicals, which must be compounded to prepare a herbicide or insecticide product.⁶ MALIK et al states, "The emulsifying and dispersing capabilities of the dispersing agents of the present invention also make them less resistant to being removed by rain from the surface of a growing plant. The reader is suggested to review U.S. Pat. No. 4,512,989 issued Apr. 23, 1985 to OHYAMA et al. for a general disclosure of agricultural compositions with which the present invention is concerned."⁷

MALIK et al specifically mentions the usefulness of alkyl polyglycosides.⁸

DUPONT teaches that sulfonylurea herbicides are very effective inhibitors of plant cell division and growth. They inhibit the activity of a key enzyme in plants (acetolactate synthase, or ALS) for plant cell growth.⁹ Furthermore, DUPONT teaches that Escort, Oust, and Telar (all members of the sulfonylurea family of herbicides) dispersible granules have proven to be stable when stored in their original containers at

⁵ See lines 11-17 of col. 1.

⁶ See lines 29-41 of col. 1.

⁷ See lines 58-65 of col. 1.

⁸ See lines 34-37 of col. 2.

Art Unit: 1616

normal temperatures.¹⁰ DUPONT also teaches that, at pH 5 and pH 9, the hydrolysis half-life is stable.¹¹

The instant claims differ from the prior art in claiming a broader scope.

One skilled in the art would have been motivated at the time of invention to prepare any solid composition of any herbicides such as sulfonylureas and alkyl polyglycosides because the prior art of MALIK et al and DUPONT teach these compositions, their uses, and their process of making. The solid composition has been taught by the prior art. Therefore, one skilled in the art who needs to prepare a solid composition of herbicide urea and polyglycosides would be able to make and/or use it because the prior art teaches such compositions and their uses.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

One skilled in the art would have been motivated at the time of invention to make the composition of alkylpolycloside and sulfonylurea herbicides as presently claimed because the KOCUR et al teaches the effective and advantageous combination of alkylglycosides and sulfonylurea herbicides and glufosinate. The instant invention is drawn to the same combination minus glufosinate, but the term "comprising" allows additional ingredients to be added. Also, the motivation is provided by KOCUR because

⁹ See second paragraph on page 1.

¹⁰ See "Stability" paragraph on page 1.

¹¹ See "Hydrolysis Half-Life Table" on page 2.

Art Unit: 1616

it teaches the combined formulations sulfonylureas and polyalkylglycosides are storage-stable, undergo virtually no chemical changes, and are simple to handle.¹²

The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See, e.g., *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1368, 66 USPQ2d 1631, 1634 (Fed. Cir. 2003) ("**Comprising**" is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim.); *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); *Ex parte Davis*, 80 USPQ 448, 450 (Bd. App. 1948) ("**comprising**" leaves "the claim open for the inclusion of unspecified ingredients even in major amounts").

Compositions can be prepared in solid forms or liquid forms.

The Examiner notes that one example has been disclosed by the Applicants to show the stability of sulfonylurea. However, KOCUR et al teaches that the combined formulations containing sulfonylureas and polyalkylglycosides are storage-stable, undergo virtually no chemical changes, and are simple to handle.¹³ And DUPOND teaches that dispersable granule are more stable.

In the absence of any criticality and/or unexpected results, the instant invention is considered *prima facie* obvious over KOCUR et al.

¹² See lines 29-31 in col. 3.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

Data in the Specification

The data in the specification has been considered by the Examiner. The example 16 is drawn to sulfonyl urea metasulfuron-methyl. It has been established by the Courts that a single species is seldom, if ever, sufficient to support a generic claim. *In re Shokal*, 242 F.2d 771, 113 U.S.P.Q. 283, 285 (C.C.P.A. 1957). See also, *In re Grimme*, 274 F.2d 949, 124 U.S.P.Q. 499, 501 (C.C.P.A. 1960) (the naming of a member of a genus or subgenus is not a proper basis for claiming the whole group).

Objective evidence of nonobviousness must be **commensurate** in scope with the scope of the claims. *In re Tiffin*, 171 USPQ 294. A showing limited to a single species can hardly be considered probative of the invention's nonobviousness in view of the breadth of the claims.

Even if the data would have been presented, KOCUR et al teaches that the combined formulations containing sulfonylureas and polyalkylglycosides are storage-stable, undergo virtually no chemical changes, and are simple to handle.

Response to Arguments

¹³ See lines 29-31 in col. 3.

Art Unit: 1616

- The 101 rejection: Until the disclaimer is approved and processed by the Branch, the rejection will be maintained. Arguments were fully considered but are not found persuasive. The Applicants' concern over the processing of the terminal disclaimer has been duly noted. The Examiner directs Applicants to MPEP 1490, which states that the statutory disclaimer (filed with the Brief) must be *processed and approved* by the Certificate Of Correction Branch..
- All the rejections are maintained because arguments are not found persuasive. "One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references." In re Keller, 642 F.2d 413, 208 SPQ 871 (CCPA 1981); In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). See MPEP 2145.
- Applicant response regarding 112 (2) paragraph is confusing. Applicant is kindly requested to explain the issue.


Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi, Ph.D. whose telephone number is 571-272-0622. The examiner can normally be reached on any business day.

Art Unit: 1616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter, Ph.D. can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SABIHA QAZI, PH.D
PRIMARY EXAMINER